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10/017,894

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EXAMINER

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte PAUL JOSEPH DATTA,
ROBERT EUGENE VOGT,
THOMAS WALTER ODORZYNSKI,
CASSANDRA ELIZABETH MORRIS,
and
JENNIFER ELIZABETH POZNIAK,
Appellants

Appeal 2008-4586
Application 10/017,894¹
Technology Center 3700

Decided: September 24, 2008

Before CAROL A. SPIEGEL, DONALD E. ADAMS, and ERIC GRIMES,
Administrative Patent Judges.

SPIEGEL, *Administrative Patent Judge.*

DECISION ON APPEAL

I. Statement of the Case

¹ Application 10/017,894 ("the 894 application"), *Pre-fastened Absorbent Article Having Simplified Fastening Features*, filed 14 December 2001, claims benefit under 35 U.S.C. § 119 of provisional application 60/272,548, filed 1 March 2001. The real party in interest is said to be Kimberly-Clark Worldwide, Inc. (Substitute Brief on Appeal to the Board of Patent Appeals and Interferences filed 6 April 2007 ("Br."), at 1).

Appellants appeal under 35 U.S.C. § 134 from a final rejection of claims 2, 9, 10, 15-17, and 22. Claims 3-6, 11-14, and 18-21, the only other pending claims, have been withdrawn from consideration (Br. 1; Ans.² 2). We have jurisdiction under 35 U.S.C. § 6(b). We REVERSE.

The subject matter on appeal is directed to a pant-like, prefastened, disposable absorbent article. Claim 22 is illustrative and reads (Br. 11-12, indentation and emphasis added):

22. A pant-like, prefastened, disposable absorbent article including an absorbent, a front waist region, a back waist region, a crotch region that extends between and connects the waist regions, a longitudinal direction, a lateral direction, an exterior surface, an interior surface opposite the exterior surface, a pair of laterally opposed side edges and a pair of longitudinally opposed waist edges, the absorbent article further comprising:

a multiple property fastener attached in one of the front waist region and the back waist region, the multiple property fastener defining a fastener longitudinal direction, a fastener lateral direction and a fastener area, the multiple property fastener further comprising at least two zones,

at least one engagement zone of a first mechanical fastening material and at least one non-abrasive zone of a second mechanical fastening material

wherein the first mechanical fastening material is comprised of a polymeric material selected to have a flexural modulus greater than about 30 kilopounds per square inch and the second mechanical fastening

² Examiner's Answer filed 11 June 2007 ("Ans.").

material is comprised of a polymeric material selected to have a flexural modulus between about 7 kilopounds per square inch and about 30 kilopounds per square inch.

The Examiner has rejected claims 2, 9, 10, 15-17, and 22 as unpatentable under 35 U.S.C. § 102(b) or, in the alternative, under 35 U.S.C. § 103(a), over Kline³ in light of Battrell⁴ (Ans. 3 and 7).

Since Appellants have not separately argued the patentability of any dependent claims 2, 9, 10, and 15-17, we decide this appeal on the basis of claim 22, the sole independent claim. 37 C.F.R. § 41.37(c)(1)(vii).

The dispositive issue is whether Kline, which incorporates Battrell by reference, discloses or suggests an article having a multiple property fastener including two mechanical fastening materials where the first mechanical fastening material comprises a polymeric material selected to have a flexural modulus greater than about 30 kilopounds per square inch (kpsi) and the second mechanical fastening material comprises a polymeric material selected to have a flexural modulus between about 7 kpsi and about 30 kpsi.

II. Legal principles

“[T]he Examiner bears the initial burden, on review of the prior art or on any other ground, of presenting a *prima facie* case of unpatentability.” *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992). “If examination at the initial stage does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to grant of the patent.” *Id.*

³ U.S. Patent 5,957,908, *Elastomeric Side Panel for Use with Convertible Absorbent Articles*, issued 28 September 1999, to Kline et al. ("Kline").

⁴ U.S. Patent 4,946,527, *Pressure-Sensitive Adhesive Fastener and Method of Making Same*, issued 7 August 1990, to Charles F. Battrell ("Battrell").

To anticipate a claim, a prior art reference must, either expressly or inherently, disclose each and every limitation in the claim. *In re Schreiber*, 128 F.3d 1473, 1477 (Fed. Cir. 1997); *Verdegaal Bros. v Union Oil Co.*, 814 F.2d 628, 631 (Fed. Cir. 1987). "Absence from the reference of any claimed element negates anticipation." *Kloster Speedsteel AB v. Crucible, Inc.*, 793 F.2d 1565, 1571 (Fed. Cir. 1986). Probabilities or possibilities will not be sufficient to establish an inherent event. *Continental Can Co. USA, Inc. v. Monsanto, Co.*, 948 F.2d 1264, 1269 (Fed. Cir. 1991).

A claimed invention is not patentable if it would have been obvious to a person of ordinary skill in the art. 35 U.S.C. § 103(a); *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727 (2007); *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1 (1966). Facts relevant to a determination of obviousness include: (1) the scope and content of the prior art, (2) any differences between the claimed invention and the prior art, (3) the level of ordinary skill in the art and (4) relevant objective evidence of nonobviousness. *KSR*, 127 S.Ct. at 1734; *Graham*, 383 U.S. at 17-18. All claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 984 (CCPA 1974). The Court noted that "[t]o facilitate review, this analysis should be made explicit." *KSR*, 127 S.Ct. at 1734, citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006) ("[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness").

III. Discussion

A. The Examiner's position

According to the Examiner, "Kline . . . clearly teaches all the claimed structure and function [of the article of claim 22] except the polymeric materials comprising the first and second fastening materials having different specific ranges of flexure [sic] modulus" (Ans. 5). Further according to the Examiner, there is sufficient factual basis for one to conclude that the fastening materials taught by Kline inherently include the same properties as those of the claimed fastening materials when tested similarly (Ans. 6).

Alternatively, the Examiner finds "Kline/Battrell teach the general conditions of the claim, i.e. multiple properties, engaging, nonabrasive, materials are not the same, materials having a flexure [sic] modulus (all materials have a flexure [sic] modulus)" (Ans. 7). The Examiner concludes "it would have been obvious . . . to employ a first and second fastening material[s] as claimed, i.e. materials made of polymeric materials as claimed, since . . . where the general conditions of a claim are disclosed, . . . discovering the optimum or workable ranges involves only routine skill in the art" (Ans. 7).

Relative to the claimed multiple property fastener, the Examiner specifically finds Kline:

teaches at least one engagement zone of a first mechanical fastening material and at least one engagement zone of a second mechanical fastening material, see, e.g., col. 23, lines 9-13 and col. 17, line 14-col. 18, line 6, i.e., multiple zones of mechanical fastening material, and/or Figure 7, col. 16, lines 30-62, col. 17, line 14-col. 18, line 6, col. 18, lines 8-9 and col. 22, lines 17-19, e.g. zones 253 and 254 which can include mechanical fastening material, and/or col. 17, lines 14-18 and

32-37, and thereby Battrell . . . at Figures 1-2, col. 7, line 37-col 8, line 2, col. 10, lines 61-64, col. 11, lines 53-55, and col. 12, lines 13-24, i.e. mechanical fastening material having different zones due to nonuniform pattern, size, spacing, density and/or composition (Ans. 5).

The specific disclosures of Kline and Battrell cited by the Examiner, along with a summary of each reference, are presented below.

B. Kline

[1] Kline discloses

absorbent articles such as disposable diapers, incontinent briefs, diaper holders, training pants, and the like, having elastomeric ear panels and a fastening system that provides the user with different options as to how the absorbent article may be fitted to and removed from the wearer. The diaper allows the wearer to choose between conventional and pull-on diaper configurations, or combinations thereof. . . The ear panels maintain sufficient tension to hold the diaper on the wearer throughout the period of use without harming the wearer's skin, while providing enough stretch to allow the diaper to be pulled up or down over the wearer's hips. Further, the fastening system is refastenable for convenience yet strong enough to maintain the diaper in a fastened configuration without becoming detached if the diaper is pulled on or off the wearer. (Kline 3:25-42).

[2] Figure 7 of Kline shows "a cut away plan view of one embodiment of an ear panel . . . comprising differential bonding" (Kline 4:55-57).

[3] According to Kline, the differential bonding shown in Figure 7 includes "high bond zones," which resist creeping and provide a stronger foundation for any fastening elements that may be joined

thereto, and "low bond zones," which provide increased breathability and/or better properties for ring rolling the laminate in those zones (Kline 16:30-62).

- [4] As to the fastening system, Kline states (Kline 17:14-37),

[t]he fastening system **200** may comprise any attachment means known in the art including pressure sensitive adhesives, cohesive materials, *mechanical fasteners such as hook and loop type fasteners*, or any combination of these or any other attachment means known in the art. . . An example of a fastening system having combination mechanical/adhesive fasteners is described in U.S. Pat. No. 4,946,527 . . . issued to Battrell . . . incorporated herein by reference.

- [5] "In a preferred embodiment . . . the fastening system **200** comprises hook and loop type fasteners" (Kline 17:38-40).
- [6] Suitable hook or "engaging" materials "include nylon, polyester, polypropylene, or any combination of these materials" (Kline 17:40-42, 62-63).
- [7] Examples of preferred hook fastening materials include (a) products 960, 957, and 942 available from Aplix Inc., (b) products CS200, CS300, MC5 and MC6 available from Minnesota Mining and Manufacturing Company, and (c) materials described in U.S. Patent 5,058,247 issued to Thomas (Kline 17:64-18:6).
- [8] The "engaging" materials may be joined to the absorbent article by direct or indirect joining with any portion of the ear panels (Kline 18:7-13).
- [9] The "landing" component or loop may comprise identical or distinct complementary configuration or structure as the hook (Kline 21:5-16).

- [10] The loop may be manufactured from a wide range of materials to provide fiber elements, preferably loops, e.g., woven materials, nonwovens, nylons, polyesters, polypropylenes, or any other known fastening materials (Kline 21: 29-34).
- [11] According to Kline, the engaging and landing components may be of any size and shape (Kline 22:17-19).
- [12] Further according to Kline, the fastening system may include two or three closure members comprising at least one engaging component each (Kline 23:9-13).

C. Battrell

- [13] Battrell discloses
- a pressure-sensitive adhesive fastener . . . [having]
a textured fastening surface so as to have a
relatively high shear resistance and a desired peel
resistance. The pressure-sensitive adhesive
fastener comprises a backing web having bulbous
surface aberrations projecting from a surface of the
web and a layer of pressure-sensitive adhesive
coated over and bonded to at least a portion of the
bulbous surface aberrations of the backing web.
- . . . [T]he fastening system preferably comprises a
first member comprising the pressure-sensitive
adhesive fastener and a landing member
engageable with the pressure-sensitive adhesive
fastener. The landing member has a textured
surface, preferably a surface that allows nesting of
the bulbous surface aberrations of the first member
with the textured surface of the landing member,
so that the desired properties of the fastener are
obtained. (Battrell 3:3-23)

- [14] Figures 1 and 2 of Battrell show fragmentary views of a pressure-sensitive adhesive fastener (Battrell 3:40-44).
- [15] According to Battrell, the pressure-sensitive adhesive fastener may comprise multiple zones and include at least about 20, preferably between about 400 to about 10,000, bulbous surface aberrations per square inch in one or more of the zones (Battrell 7:37-59).
- [16] Further according to Battrell, the bulbous surface aberrations need not be of the same size or form regular or repeating patterns (Battrell 7:60-8:2).
- [17] As stated in FF 13, a layer of adhesive is coated over and bonded to at least a portion of the surface of the bulbous surface aberration (Battrell 10:61-64; 11:53-55).
- [18] The adhesive layer need not coat each bulbous surface aberration or the entire surface of the backing web (Battrell 12:13-24).

D. Analysis

The Examiner has not pointed to any disclosure in Kline or Battrell discussing the materials used for engaging and landing materials in terms of their flexural modulus. The Examiner has not shown a nexus between polymeric materials taught by Kline and/or Battrell as suitable engaging and/or landing materials and polymeric materials disclosed in Appellants' specification ("Spec.") as suitable first and/or second mechanical fastening materials.

For example, according to the 894 specification, "Particular examples of a first mechanical fastening material can include VELCRO HTH 858 or VELCRO HTH 823, or a similar hook material available from Velcro Industries B.V." (Spec. 24:16-18). Thus, one of ordinary skill in the art

might reasonably expect VELCRO HTH 858 or VELCRO HTH 823, or a similar hook material available from Velcro Industries B.V. to have a flexural modulus of greater than about 30 kpsi. According to Kline, "products CS200, CS300, MC5 and MC6 available from Minnesota Mining and Manufacturing Company" are suitable hook forming materials (FF 7). The Examiner might have shown that VELCRO HTH 858 and VELCRO HTH 823 and CS200, CS300, MC5 and MC6 have similar polymeric properties of structure, composition, etc. However, simply establishing that Kline and/or Battrell disclose fastening systems comprising first and second polymeric components which may be present in different zones is an insufficient factual basis to find that Kline and/or Battrell disclose fastening materials inherently possessing the claimed flexural modulus.

Alternatively, the Examiner might have provided an evidentiary basis relating flexural modulus to some other disclosed property of the fastening materials disclosed by Kline and/or Battrell to establish inherency. For example, the Examiner might have shown that it is common knowledge in the art that a flexural modulus may be calculated as a function of some disclosed property of a pressure-sensitive adhesive fastener material as described by Kline and/or Battrell and, therefore, one of ordinary skill in the art would have reasonably expected the material of Kline and/or Battrell to have had the claimed flexural modulus.

We agree with the Examiner that evidence of inherency which reasonably supports a *prima facie* case of anticipation under 35 U.S.C. § 102 and/or obviousness under 35 U.S.C. § 103 is sufficient to require Appellants to provide rebuttal evidence. *In re Best*, 562 F.2d 1252, 1255 (CCPA 1977). However, the evidence in support of inherency in this case must establish or

reasonably suggest that the missing descriptive flexural modulus properties of the first and second polymeric mechanical fastening materials of the fastening system described by Kline and/or Battrell is necessarily present as claimed, not merely that the same or possibly the same type of generic polymeric material was used to fashion mechanical fastening components in the form of hooks and loops. This the Examiner has not done. In other words, the Examiner has not provided evidence of inherency which reasonably supports a *prima facie* case of anticipation and/or obviousness under § 102 and/or §103 sufficient to require Appellants to provide rebuttal evidence.

Finally, the Examiner's conclusion that it would have been obvious to use first and second polymeric materials having the claimed flexural modulus as a matter of routine optimization of result effective variables cannot be sustained without some articulated underlying basis. It is readily apparent that as a material's stiffness increases its flexibility generally decreases. However, the Examiner has not factually established general conditions of stiffness and/or flexibility in the pant-like, prefastened, disposable absorbent article art or analogous art based on the teachings of Kline and/or Battrell and/or the knowledge of one of ordinary skill in the art. Instead, the Examiner merely concludes it would have been obvious to use first and second polymeric materials having the claimed flexural modulus because a flexible material is less stiff, less rigid or less hard.

Therefore, we reverse the rejections of claims 2, 9, 10, 15-17, and 22 as unpatentable under 35 U.S.C. § 102(b) or, in the alternative, under 35 U.S.C. § 103(a), over Kline in light of Battrell.

IV. Order

Appeal 2008-4586
Application 10/017,894

Upon consideration of the record, and for the reasons given, it is
ORDERED that the decision of the Examiner rejecting claims 2, 9,
10, 15-17, and 22 as unpatentable under 35 U.S.C. § 102(b) or in the
alternative, under 35 U.S.C. § 103(a), over Kline (and thereby Battrell) is
REVERSED.

REVERSED

MAT

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